

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/EP 03/05639

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01M2/16

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 246 798 A (YAACOU B CLAUDIA M) 21 September 1993 (1993-09-21) cited in the application column 2, line 55 - line 59 column 2, line 65 - column 3, line 14 column 3, line 38 - column 4, line 48 column 5, line 4 - line 18 column 4, line 29 - line 53 example 2 claims 1-7, 9-13, 15, 16, 18	1-6, 13-18
A	US 4 778 601 A (YEN LARRY Y ET AL) 18 October 1988 (1988-10-18) das ganze Dokument	1-18
A	EP 0 618 629 A (GRACE W R & CO) 5 October 1994 (1994-10-05) das ganze Dokument	1-18

☐ Further documents are listed in the continuation of box C:

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

24 October 2003

Date of mailing of the international search report

03/11/2003

Name and mailing address of the ISA

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: **18 PARTIAL**
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

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PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

Box I.2

Claim 18 (in part)

The current Claim 18 relates to the use of a compound of formula (I) for improving the oxidation resistance of battery separators and thermoplastic polymers, characterised in each case by a desirable characteristic or property, namely improved oxidation resistance. The claim therefore encompasses both battery separators and thermoplastic polymers that have this characteristic or property, and yet the application only provides support in the description (PCT Article 5) for battery separators. In the present case, part of the claim lacks the proper support and the application lacks the requisite disclosure to such an extent that it appears impossible to carry out a meaningful search covering the entire range of protection sought. Moreover, the claim also lacks the requisite clarity (PCT Article 6) since it attempts to define the product in terms of the result which it is desired to achieve. This lack of clarity too is such that it is impossible to carry out a meaningful search covering the entire scope of protection sought. The search was therefore directed to the part of the claim that appear to be clear, supported and disclosed in the above sense, that is the part relating to the use of a compound of formula (I) for improving the oxidation resistance of battery separators.

The applicant is advised that claims or parts of claims relating to inventions in respect of which no international search report has been established normally cannot be the subject of an international preliminary examination (PCT Rule 66.1(e)). In its capacity as International Preliminary Examining Authority the EPO generally will not carry out a preliminary examination for subjects that have not been searched. This also applies to cases where the claims were amended after receipt of the international search report (PCT Article 19) or where the applicant submits new claims in the course of the procedure under PCT Chapter II.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/EP 03/03639

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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			US 5362582 A	08-11-1994
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